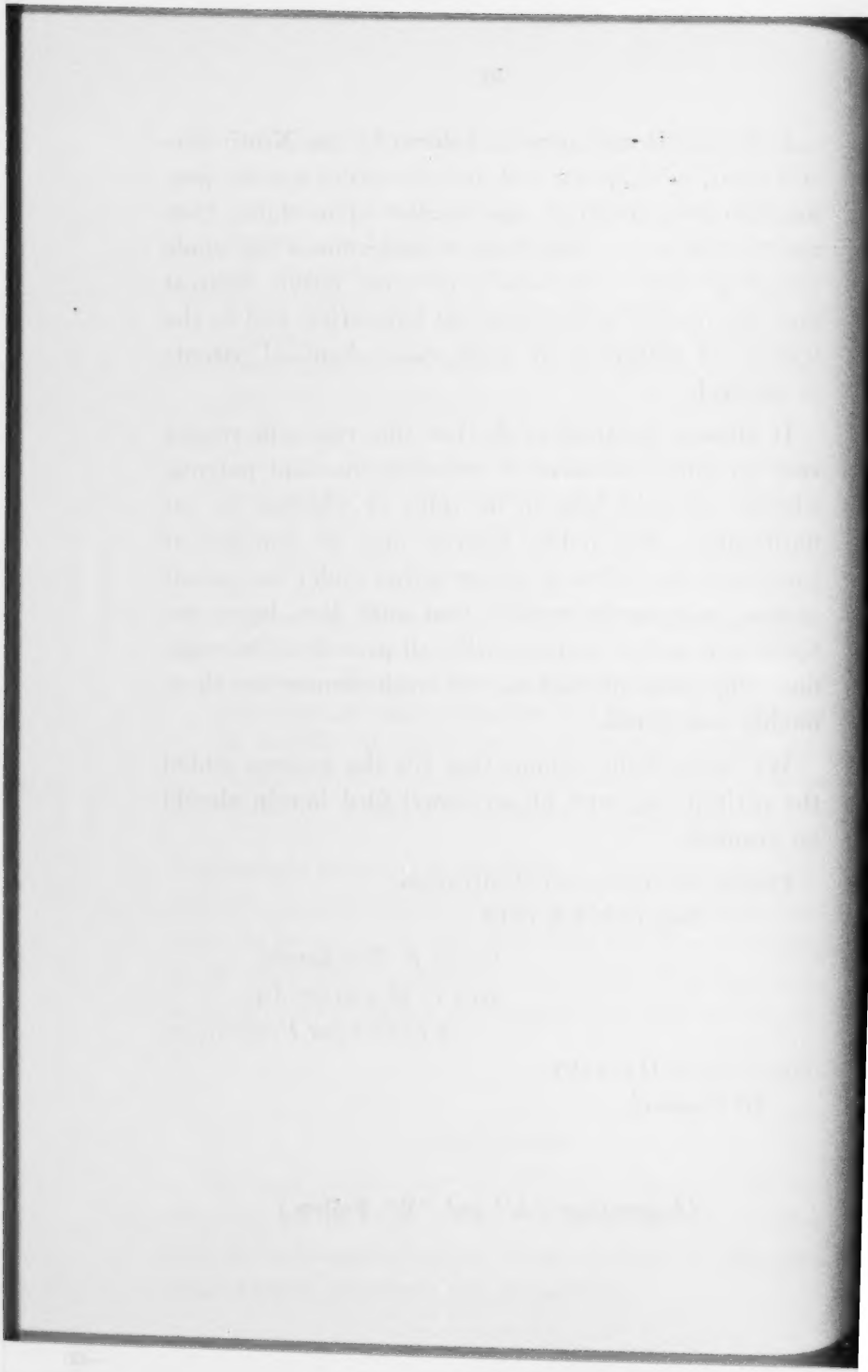

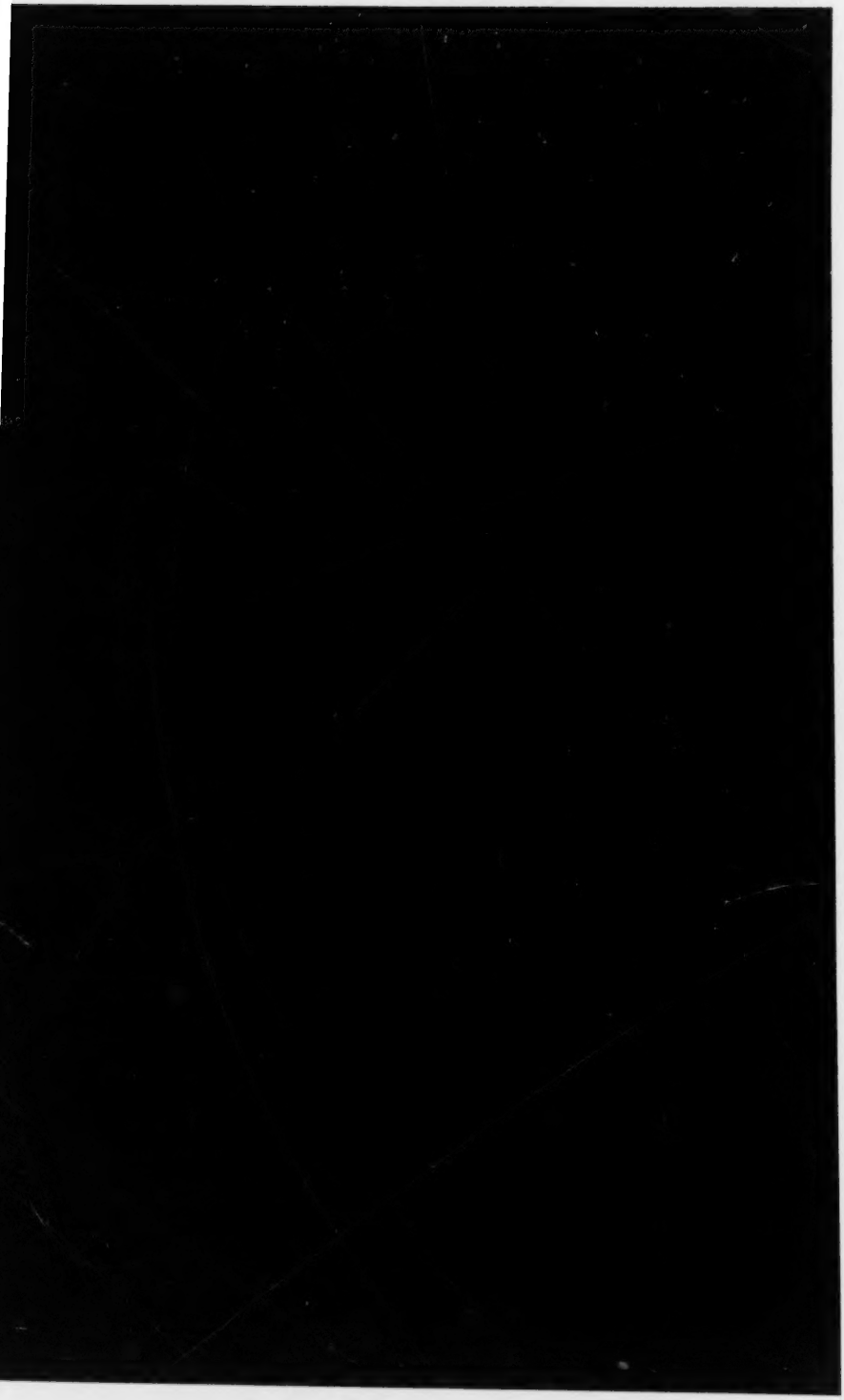

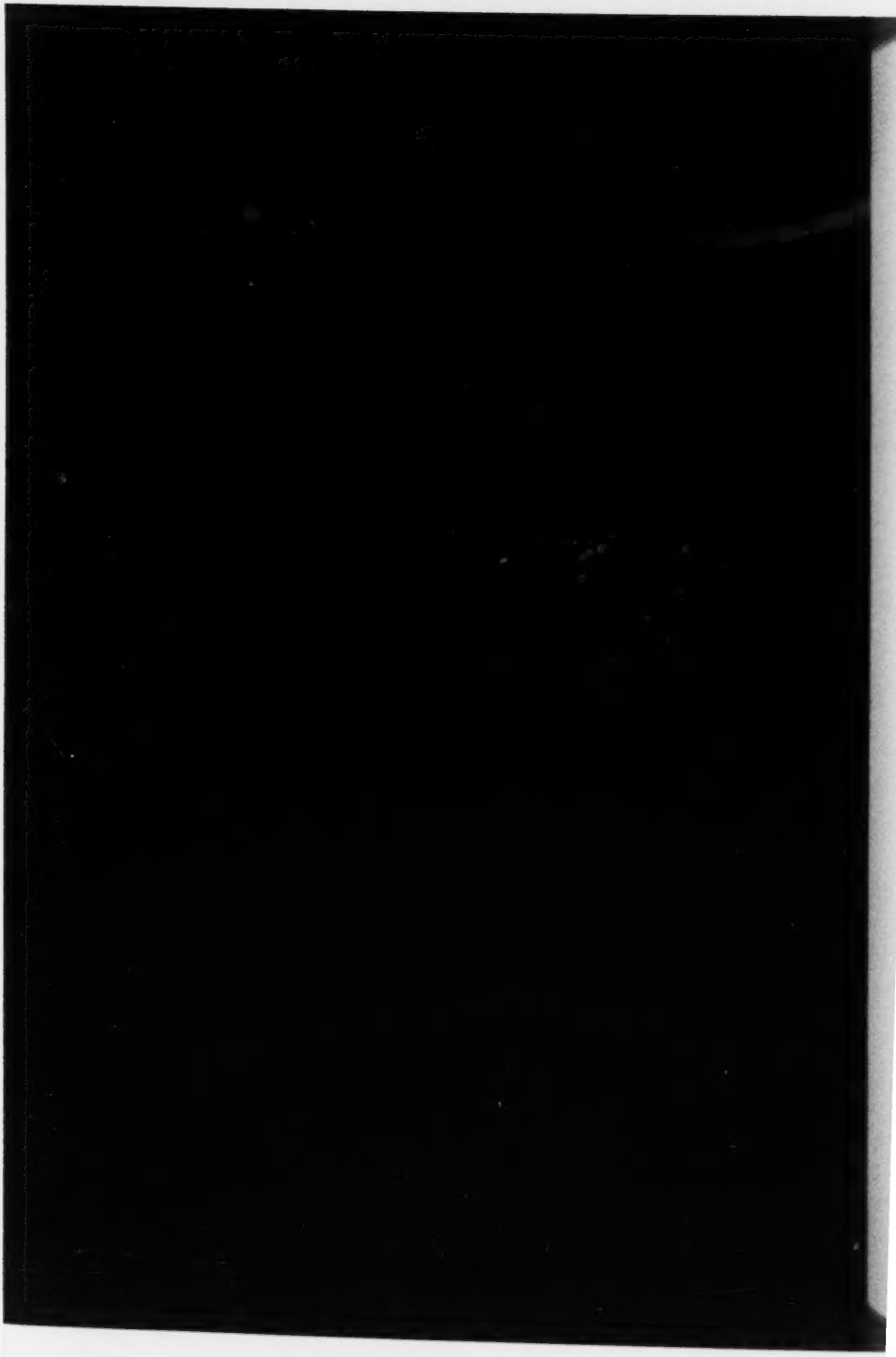

Appendix A

SECTIONS 4886 AND 4888 OF THE PATENT STATUTES.

Sec. 4886 (U. S. C., title 35, Sec. 31): "Any person who has invented or discovered any new and useful art, machine, manufacture, or **composition of matter,** or any new and useful improvements thereof, not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor."

Sec. 4888 (U. S. C., title 35, Sec. 33). "Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable **any person skilled in the art or science to which it appertains,** or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall

particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor. No plant patent shall be declared invalid on the ground of noncompliance with this section if the description is made as complete as is reasonably possible."

Appendix B

The record establishes without dissent that the poultry industry in many sections of this country is one of major proportions.

That until the advent of the inventions in suit about a decade ago, one of the great and serious problems of this industry was the widespread presence in poultry flocks of the deadly intestinal roundworm. While numerous attempts to control this problem were made, and many remedies therefor were suggested, nothing successful had been developed; and as a consequence, flock mortality was great and egg production was heavily impaired.

That it was for Mr. Lindstaedt, a skilled chemist in this field, to devise a remedy and a method of controlled application thereof, whereby a suitable toxic substance could be administered to a fowl in such quantity that, although normally it would be lethal to the fowl, it nevertheless would pass harmlessly through the digestive tract until it reached the intestinal tract, where the toxic agent is released and destroys the parasite in the intended manner, at all times leaving the fowl unharmed.

That Mr. Turnbow, another and later skilled worker in the same field, improved on the Lindstaedt disclosures by the discovery of a method whereby the parasiticide, instead of having to be administered to each chicken separately and manually, could be fed to the animals in flocks.

That these discoveries were instantly appreciated in the industry, and were of such tremendous importance and effect in this particular field as to rank them of primary character.

THE LINDSTAEDT PATENT EXPLICIT.

FOR MATERIALS. The Lindstaedt specification defines the preferred **alkaloidal toxic substance** as follows (1:1:20-23):*

> "Alkaloidal substances such as **nicotine, coniine or their salts such as the sulphates,** in sufficient quantity, are effective for destroying parasites such as round worms in animals."

"Colloidal substances" are then defined by the patentee as follows (1:2:6-23):

> "An organic substance of colloidal nature is preferred due to the fact that such substance forms with an alkaloidal substance a product which provides efficacious and thorough destruction of parasites such as round worms. Also, with an organic substance of colloidal nature, relatively large quantities of alkaloidal substance may be administered therewith, without undue shock to the animal. Proteins such as hide-glue, casein powder, peanut meal, pea meal and soy bean meal, are some of the substances of colloidal nature which are satisfactory; substances such as kamala powder, tragacanth powder, powdered Indian gum, powdered agar-agar and powdered shellac,

*In thus referring to quotations from the patents, the first number designates the page of the patent, the second the column, and the third the lines. Thus the above reference signifies "Page 1, column 1, lines 20 to 23".

all of the class of gums and resins, are also satisfactory; also, powdered starch, which is a corbohydrate, and powdered soap, may be used."

For Proportions. The specification and claims call **"a toxic substance in quantity greater than the normally lethal dose"**. A lethal dose is described (1:1:23-33) as follows:

> "If any of these substances (nicotine) are administered alone, it has been found that quantities thereof sufficient to destroy the parasites will also destroy the life of the animal. For example, 5 to 10 milligrams of an alkaloidal substance, such as pure nicotine or nicotine sulphate, is a lethal dose when placed in the mouth of a chicken. Quantities less than this amount are not efficient for the destruction of the parasites. In view of this, the use of these compounds alone is impractical."

The **latitude as to quantity** is illustrated in the patent (1:1:42-50):

> "When the toxic substance is used with any of these substances, a quantity, in excess of that which is normally a lethal dose, may be employed, thus effecting an efficient and thorough destruction of internal parasites. As an example, 70 to 80 milligrams of alkaloidal substances may be administered in this fashion to a chicken, without destroying its life."

Teaching by Example. In order that there be no misunderstanding, the patentee goes on to give a prescription, as follows (1:2:24-29):

> "In preparing the parasiticide, it is preferred to form approximately one gram pellets, containing 70 to 80 milligrams of any of the described alkaloidal substances and about 900 to 1000 milligrams of any of the described substances of colloidal nature."

For corroborative proof that this language was clear and sufficient to the man "skilled in the art" we need only turn to the defendant-respondent's advertising, exemplified by their "Kon-Trold Nicotine" label, Exhibit 7, where appears the following:

> "KON-TROLD NICOTINE is made by a special process which houses the 40% nicotine solution in a chemical compound that controls the release of the nicotine, so that it can be given to poultry with no toxic reaction on the birds. KON-TROLD NICOTINE is not liberated in crop or gizzard of the bird, but is released full strength by the alkaline digestive juices in the intestines."

The balance of the label, of course, directs its attention to the mode of feeding the product to the bird.

Petitioners and respondent both use nicotine sulphate, and both use a colloidal holding substance in combination with nicotine sulphate. Petitioners' and respondent's preparations practically coincide.

LINDSTAEDT CLAIMS.

The Lindstaedt claims in issue are:

> "2. A parasiticide for internal use comprising a toxic substance in quantity greater than the normally lethal dose and a colloidal substance for colloidally holding the toxic substance to protect against the lethal effect of such dose.

"3. A parasiticide for internal use comprising a lethal sized dose of an alkaloidal substance combined into a colloidal substance adapted to colloidally hold the alkaloidal substance and protect against the lethal effect of said alkaloid.

"6. A non-lethal parasiticide for internal administration, for intestinal parasites, comprising the combination of an alkaloid in a dose normally parasiticidal to said parasites and lethal to the subject being treated on ingesting the same alone, and an organic colloid, said organic colloid rendering said dose non-lethal to the subject being treated and leaving it parasiticidal to said parasites.

"8. A non-lethal parasiticide for internal administration, for intestinal parasites, comprising the combination of a nicotine substance in a dose normally parasiticidal to said parisites and lethal to the subject being treated on ingesting the same alone, and an organic colloid, said organic colloid rendering said dose non-lethal to the subject being treated and leaving it parasiticidal to said parasites.

"11. A medicinal compound comprising a toxic substance in quantity greater than the normal lethal does and casein for holding the toxic substance to protect against the lethal effect of such dose.

"12. A medicinal compound comprising nicotine in quantity greater than the normal lethal dose and casein for holding the toxic substance to protect against the lethal effect of such dose."

TURNBOW PATENT NO. 2,091,840.

Turnbow discovered that the broad invention of Lindstaedt could be prepared in the highly advantageous, finely divided form whereby it may be readily administered in the feed of the animals to be treated, for example, to poultry in flocks (Turnbow Patent Exhibit 2, 1:1:49-55, 1:2:1-2). The application of Turnbow as filed was directed to the broad discovery of Lindstaedt, Turnbow going beyond Lindstaedt to disclose the flock treatment or finely divided (comminuted) form of parasiticide or vermifuge. The Turnbow and Lindstaedt patents were co-pending in the United States Patent Office. During this period of co-pendency an interference was declared between the two applicants and was terminated in favor of Lindstaedt, the earlier to file by a matter of fifteen months. Following this the claims remaining in the Turnbow application were limited to a **finely divided** or **comminuted** form of product comprising an active toxic agent, for example, nicotine, and a colloidal holding agent, for example, agar-agar.

TURNBOW CLAIMS.

The Turnbow claims in issue are:

"1. A medicinal compound in finely divided condition comprising a normally toxic substance incorporated in agar-agar in proportions to render said substance substantially non-toxic to fowls when given in quantities sufficient to destroy parasites of the intestinal tract.

"2. A medicinal compound in finely divided condition comprising agar-agar and nicotine sub-

stance, said compound being non-toxic to fowls when given in quantities sufficient to destroy parasites of the intestinal tract.

"7. A compound of the character described in finely divided condition comprising a normally lethal dose of toxic substance incorporated in a substance of colloidal nature, said colloidal substance colloidally holding the toxic substance to protect against the effect of such dose."